

Appl. No. 09/675,530
Amdt. dated September 20, 2004
Reply to Office action of July 1, 2004

REMARKS/ARGUMENTS

Applicants received the Office Action dated July 1, 2004, in which the Examiner: (1) rejected claims 33-37 under 35 U.S.C. § 112, second paragraph, as indefinite; (2) rejected claims 1-15 and 28-40 as anticipated by U.S. Patent No. 5,963,656 ("Bolle"); (3) rejected claims 28-32 as obvious in view of U.S. Patent No. 6,292,576 ("Brownlee") and U.S. Patent No. 6,674,902 ("Kondo"); (4) rejected claims 33-37 as obvious in view of Brownlee, Kondo and U.S. Patent No. 5,987,156 ("Ackland"); and (5) allowed claims 16-27. In this Response, Applicants amend claims 28 and 33. Based on the amendments and the arguments presented herein, Applicants respectfully request reconsideration and allowance of the pending claims.

I. 35 U.S.C. § 112 REJECTIONS

Claim 33 was amended, in part, to ensure proper antecedent basis. Therefore, Applicants submit that claims 33-37 meet the requirements of 35 U.S.C. § 112.

II. § 102 AND § 103 REJECTIONS

Claim 1, in part, requires "an interface coupled to the device to receive the transmitted images, wherein the interface is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally." The Examiner argues that "apparatus claims cover what a device is and not what a device does" (see MPEP 2114) and that Bolle teaches all the structural limitations of claim 1. However, claim 1 is allowable over Bolle for either of two reasons. First, the "configured to" language represents a structural limitation that is not taught in Bolle. Second, even if the "configured to" language is construed as functional language, the Examiner is nevertheless required to evaluate and consider the limitation, just like any other limitation of the claim (see MPEP 2173.05(g)).

In claim 1, the phrase "the interface is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally" implies a structural configuration that Bolle does not teach or suggest. The language "configured to compare subsequent images and

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determine if the subsequent images include bands that differ positionally" does not eliminate structure, but broadly describes the scope of the claimed interface structure so that unnecessary structural limitations are not read into the claim. Therefore, the scope of claim 1 may cover any "interface" having a structure that "is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally." None of the references cited by the Examiner, nor combinations of the references, teaches or suggests any structure that anticipates an "interface [that] is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally" as required in claim 1.

Further, Applicants submit that the Examiner has misconstrued the phrase "apparatus claims cover what a device is and not what a device does." In context, the quote from *In re Danly* reads "apparatus claims cover what a device is, not what a device does. An invention need not operate differently than the prior art to be patentable, but need only be different." Therefore, *In re Danly* is directed to distinguishing between apparatuses having an equivalent operation but a different structure. In other words, an apparatus may be patentable due to structure even when function is equivalent to another apparatus.

At any rate, claim 1 requires "[an] interface [that] is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally" and therefore is directed to what a device is and not simply what a device does as suggested by the Examiner. The fact that the limitation is broadly worded does not signify that the structure of the configured "interface" is nonexistent or unpatentable.

The Examiner also argues that "the manner of operating the device does not differentiate apparatus claim[s] from the prior art" (see MPEP 2114). However, the Examiner incorrectly assumes that the phrase "configured to compare subsequent images and determine if the subsequent images include bands that differ positionally" as required in claim 1 is simply functional in scope. Applicants submit that the above phrase is not simply functional but describes a structural limitation regarding the claimed interface's configuration. Because

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Bolle does not teach all the structural limitations of the claimed computer system, which comprises "a biometric device configured to transmit images" and "an interface coupled to the device to receive the transmitted images, wherein the interface is configured to compare subsequent images and determine if the subsequent images include bands that differ positionally," the Examiner incorrectly applies MPEP 2114.

Even if the Examiner argues that the phrase "configured to compare subsequent images and determine if the subsequent images include bands that differ positionally" is a functional limitation and not a structural limitation, the Examiner is still required to evaluate and consider the limitation, just like any other limitation of the claim (see MPEP 2173.05(g) Functional Limitations). Also, any argument made by the Examiner that the above limitation is inherently taught in the prior art must be supported by rationale or evidence tending to show inherency (see MPEP 2112). The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic. *In re Rijchaert*, 9 F.3d 1531. The Examiner has already admitted that the functionality of Bolle is different from the functionality described in claim 1 (see Office action, page 4, section 7). Also, the Examiner allowed claims 16 and 25, which have limitations similar to the above limitations of claim 1. For at least these reasons, Applicants submit that claim 1 and all claims that depend from claim 1 are allowable.

Claim 28 was amended, in part, to replace instances of the phrase "configurable" with the phrase "configured." Amended claim 28, in part, requires a "DSP [that] is further configured to determine a most common grayscale value of pixels for each pixel line of each image frame and detect when different pixel lines in two or more subsequent image frames have a most common grayscale value below a predetermined threshold." None of the references cited by the Examiner teaches or suggests these limitations.

With respect to Bolle, the Examiner appears to address only the "camera" and the "digital signal processor coupled to the camera" limitations of claim 28. As described previously, with respect to claim 1, the phrase "is configured"

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implies a structural configuration (e.g., any hardware or software configuration). Even if the Examiner argues that the phrase, "configured to determine a most common grayscale value of pixels for each pixel line of each image frame and detect when at least one pixel line is located differently in each of two or more subsequent image frames and has a most common grayscale value below a predetermined threshold," is functional, the Examiner is required to evaluate and consider the limitation, just like any other limitation of the claim (see MPEP 2173.05(g)).

Neither Brownlee nor Kondo teaches or suggests "a DSP" configured "to determine a most common grayscale value of pixels for each pixel line of each image frame and detect when different pixel lines in two or more subsequent image frames have a most common grayscale value below a predetermined threshold." None of the references cited by the Examiner, nor combinations of the references, teaches or suggests this limitation. Also, the Examiner allowed claims 16 and 25, which have limitations similar to the above limitations of claim 28. For at least these reasons, Applicants submit that claim 28 and all claims that depend from claim 28 are allowable.

Claim 38, in part requires "if the subsequent images have greater than a threshold amount of pattern changes, the processor determines a most common grayscale pixel value for each pixel line to detect if image banding exists wherein the image banding is attributable to condition changes during a scanning process of each image." As previously mentioned, the Examiner is required to evaluate and consider functional limitations, just like any other limitation of the claim. None of the references cited by the Examiner, nor combinations of the references, teaches or suggests all of the above limitations. Also, the Examiner allowed claims 16 and 25, which have limitations similar the above limitations of claim 38. For at least these reasons, Applicants submit that claim 38 and all claims that depend from claim 38 are allowable.


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III. CONCLUSIONS

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Respectfully submitted,


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